

OBITUARIES

Reinhold Rudenberg, inventor of the electron microscope and emeritus professor of Harvard University, died in Boston on December 25, 1961, at the age of 78. A native of Germany, he received his doctor's degree in electrical engineering from the Technische Hochschule in Hanover in 1906. In 1908 he took a position as an electrical engineer with Siemens Schuckert Works in Berlin, and in 1923 became the firm's chief electrical engineer.

He left Nazi-dominated Germany in 1936 and went to England, where he became a consultant for the General Electric Company, Ltd. Two years later Dr. Rudenberg accepted a professorship in Harvard University's Division of Engineering and Applied Physics. He retired as emeritus professor in 1952. Following his retirement from Harvard he served as visiting professor at the Universities of Rio de Janeiro and São Paulo in Brazil and at the University of Montevideo in Uruguay.

A determination to find a better instrument for the study of poliomyelitis, with which one of his sons had been stricken, led Dr. Rudenberg to devise the first electron microscope in 1931. He was also known as the author of two textbooks on power systems and transmission.

Dr. Rudenberg was a member of the American Physical Society, the Electron Microscope Society of America, and the American Academy of Arts and Sciences, and a fellow of the American Institute of Electrical Engineers.

Simon S. Share, professor of physics at Queens College in New York, died on February 7 at the age of 56. A native of Muscatine, Iowa, Dr. Share received his BS degree from Marquette University in 1928 and his MS in 1930. During the years 1930-33 he served as instructor in physics at Marquette. In 1938 he received his PhD degree from the University of Wisconsin and from 1939 until 1943 he taught at the Agricultural and Mechanical College of Texas. He served during World War II as a theoretical physicist in the Ballistics Research Laboratory at the Aberdeen Proving Ground.

Dr. Share joined the Queens faculty in 1946 as an assistant professor. He was named associate professor of physics in 1957 and was promoted to a full professorship in December of last year. At Queens he was editor and coordinator of the laboratory manuals of the Department of Physics and served as director of the Physics Department in the College's School of General Studies. He was a member of the American Physical Society and of the American Association of Physics Teachers.



W. F. G. Swann

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W. F. G. Swann, director emeritus of the Bartol Research Foundation of the Franklin Institute, died at his home in Swarthmore, Pa., on January 29. He was 77 years of age. Born and educated in England, he studied at Brighton Technical College, the Royal College of Science, University College, Kings College, and the City Guilds of London Institute.

In 1913, three years after receiving his doctorate, he came to the United States to head the physical division of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington. In 1917 he joined the staff of the National Bureau of Standards, and in the following year he turned to teaching. After serving as professor of physics at the University of Minnesota from 1918 to 1923, he spent one year at the University of Chicago, and then accepted an appointment as director of Yale University's Sloane Laboratory. He left Yale in 1927 to become the first director of the Bartol Research Foundation. He remained at Bartol for more than three decades, retiring on August 29, 1959, which was his 75th birthday.

After his retirement, Dr. Swann continued to serve the Franklin Institute as a consultant and to pursue his own research interests. He was also actively engaged in educational matters, making his services available, primarily to high-school student groups, as a visiting lecturer, demonstrator, and discussion leader, and for a time he appeared on a television program devoted to the discussion of scientific matters. He attended the last annual meeting of the American Physical Society in New York City, where, three days before his death, he presented a paper embodying his latest thoughts on the electromagnetic origin of cosmic-ray energies.

Dr. Swann was the author of more than 250 journal papers and of two books (*The Architecture of the Universe* and *Physics*); he also coauthored a third (*The*

Story of Human Error). His enthusiasm for music found expression through his cello playing and his association with various symphony orchestras. He founded the Swarthmore Symphony Orchestra and was a former director of the Philadelphia Academy of Music.

A fellow of the American Physical Society, Dr. Swann served as a member of the APS Council from 1925 to 1928 and as president of the Society from 1931 to 1933. He belonged to a number of other scientific organizations, including the American Association of Physics Teachers, the Optical Society of America, the American Philosophical Society, and the Physical Society of London.

Erich Hausmann, dean emeritus of the Polytechnic Institute of Brooklyn, died on February 22 at the age of 75. Dean Hausmann, who retired in 1953, had been a member of the Brooklyn Polytechnic faculty for 45 years, 29 of which were spent as head of the Department of Physics.

Born in Germany, he came to the United States in his youth. He graduated from Cooper Union in 1907; in the following year he received a degree in electrical engineering from Brooklyn Polytechnic and joined the faculty of that school as an instructor in physics and electrical engineering. He continued his graduate studies at New York University, receiving his master's degree there in 1910 and his ScD in 1911. He became a full professor in 1918; two years later he was named head of the Physics Department and he served in that capacity until 1949. He held a number of administrative positions at Brooklyn Polytechnic, and in several instances they were overlapping. From 1917 to 1923 he was secretary of the faculty; he was dean of graduate study from 1929 to 1944, registrar from 1944 to 1947, and dean of the Institute from 1944 to 1953.



Erich Hausmann

Dean Hausmann was the author or coauthor of several textbooks in physics and electrical engineering, and he was widely known for the tests which he devised for use in engineering colleges. In 1955, during the Brooklyn Polytechnic Institute's centennial celebration, he was awarded an honorary doctorate in engineering. Last year he received the Institute's Polytechnic Medal, and in 1960 he was honored by the Cooper Union Alumni Association, which awarded him its Gano Dunn Medal for professional achievement. A past president of the New York Electrical Society, Dean Hausmann was also a fellow of the American Institute of Electrical Engineers and of the American Physical Society.

Louis B. Tuckerman, a retired physicist who served on the staff of the National Bureau of Standards for thirty years, died on February 5 at the age of 82.

He was born in West Williamsfield, Ohio, graduated summa cum laude from Adelbert College of Western Reserve University in 1901, studied as a graduate student at the University of Nebraska and the University of Berlin, and was awarded his PhD in physics at Johns Hopkins University. During the early part of the century he taught physics first at Ohio State University and later at the University of Nebraska, where he spent the last three years of his teaching career as professor of theoretical physics.

In 1919, Dr. Tuckerman joined the National Bureau of Standards as an engineering physicist and quickly became involved in studying the mechanical properties of aircraft materials and structures. During the course of these studies he invented the optical strain gauge bearing his name, which was the first precise instrument for measuring mechanical properties of lightweight aircraft structures. He also formed a research group devoted to the study of aircraft structures. His group cooperated with the Civil Aeronautics Board in studying the causes of air accidents by analysis of the evidence obtained from the wreckage of crashed airplanes. He was appointed assistant chief of the Bureau's Division of Mechanics in 1925, and he served for 28 years as chairman of the Bureau's Educational Committee which provides graduate-level physical science courses for NBS staff members. He retired in 1949.

Dr. Tuckerman's many honors included the John Price Wetherill Medal from the Franklin Institute, the Exceptional Service Medal of the US Department of Commerce, citations from the Manhattan District and the Office of the Surgeon-General of the War Department for his services in World War II, and a letter of commendation for outstanding scientific achievement from President Truman. He represented the Bureau both in the Division of Physical Sciences of the National Research Council and on the Committee of Aircraft Structures of the National Advisory Committee for Aeronautics. Dr. Tuckerman was a fellow of the American Physical Society, a former secretary of the Optical Society of America (1929-39), and a past president of the Washington Philosophical Society (1932).